



LEGAL STATUS OF HC-12A® AND OZ-12®

Ozone Protection Hotline toll-free (800) 296-1996 • Ozone Protection Hotline direct dial (301) 614-3396
EPA SNAP World Wide Web Site: <http://www.epa.gov/ozone/title6/snap/>

- *What are HC-12a® and OZ-12®?*

HC-12a® and OZ-12® brand hydrocarbon refrigerant blends are flammable refrigerants. Their primary components are hydrocarbons, which are flammable substances like propane and butane. HC-12a® and OZ-12® are registered trademarks of OZ Technology, Inc. HC-12a® has been marketed since 1994. OZ-12® was a similar blend marketed until the introduction of HC-12a®. Both products have been reviewed by EPA under the Significant New Alternatives Policy (SNAP) program. More information about the SNAP program is available from the hotline and world wide web site listed at the top of this page.

- *What is the legal status of HC-12a® and OZ-12®?*

Since July 13, 1995, it has been illegal to replace CFC-12 with HC-12a® in any end-use other than industrial process refrigeration. This includes motor vehicle air conditioners. The same prohibition for OZ-12® took effect on April 18, 1994. EPA is concerned about potential risks posed by the flammability of these refrigerants.

- *May HC-12a® be used to replace CFC-12, commonly referred to as "Freon®," in cars?*

No. It is illegal to use HC-12a® as a substitute for CFC-12 in automobile or truck air conditioning under any circumstances. The manufacturer, OZ Technology, has not adequately responded to EPA's concerns about the safety of using a flammable refrigerant in a system not designed for it.

- *Why is it legal to use HC-12a® as a CFC-12 substitute in industrial process refrigeration, but not elsewhere?*

The industrial process refrigeration end-use does not include any air conditioning system, so the direct risk to human health is reduced. Access to areas near these systems is restricted. In addition, other regulations protect the safety of industrial workers. Finally, several large petrochemical companies have long experience using hydrocarbon refrigerants, and EPA believes they may continue to do safely.

Flammability risk depends a great deal on the type of system. Therefore, despite the acceptability of hydrocarbon refrigerants (like HC-12a®) in this end-use, it remains illegal to replace CFC-12 with hydrocarbon

refrigerants in other types of refrigeration and air conditioning systems.

- *Is sale of either OZ-12® or HC-12a® legal?*

Sale is not regulated under EPA's SNAP program. However, statutes and regulations issued by other federal, state, or local agencies may control the sale of these products, including illegal advertising.

- *May HC-12a® be vented?*

No. Since November 15, 1995, the Clean Air Act has prohibited the venting of any refrigerant during the service, maintenance, repair, or disposal of air conditioning and refrigeration systems. When working on a system containing HC-12a®, the technician must recover the refrigerant into a suitable container and safely dispose of it.

- *What other regulations restrict the use and handling of HC-12a®?*

In addition to the prohibition on use described above, and the federal law banning the venting of HC-12a®, there are also state and local statutes and regulations that relate to certain uses of hydrocarbons. As of the printing date of this fact sheet, EPA is aware that the following states prohibit the use of flammable refrigerants like HC-12a® in automobile air conditioners: Arkansas, Arizona, Connecticut, Florida, Idaho, Indiana, Kansas, Louisiana, Maryland, North Dakota, Oklahoma, Texas, Utah, Virginia, Washington, and the District of Columbia.

Local fire codes also often restrict the storage of flammable materials. In addition, other federal, state, and local regulatory agencies may have regulations related to flammable refrigerants like HC-12a®. Check with these authorities for more information.

- *Are there other refrigerants that can replace CFC-12?*

Yes. A full list of alternative refrigerants is available either from EPA's Ozone Depletion world wide web site at <http://www.epa.gov/ozone/title6/snap/> or from EPA's Ozone Hotline at 800-296-1996. In addition, the fact sheet titled "Choosing and Using Alternative Refrigerants for Motor Vehicle Air Conditioning" lists motor vehicle refrigerants and conditions on their use.